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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/014,390	10/22/2001	Rajdeep Kalgutkar	57091US002	1082

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EXAMINER	
WONG, LESLIE	
ART UNIT	**PAPER NUMBER**
2164	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	12/27/2006	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/014,390	KALGUTKAR ET AL.	
	Examiner	Art Unit	
	Leslie Wong	2164	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *05 October 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *5-12 and 14-20* is/are pending in the application.

4a) Of the above claim(s) *16-20* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *5-12 and 14-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *04/22/2002* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 101

1. Applicants' amendments, submitted on 06 June 2006, overcome the 101 rejection. Examiner hereby withdrawn the rejection that was given in the Office Action dated 28 February 2006.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 5-12 and 14-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Lackritz et al.** ("Lackritz") (US 2001/0031122 A1) in view of **Bogdanowicz et al.** ("**Bogdanowicz**")(US 5555085 A).

Regarding claim 5, **Lackritz** teaches a method of optimizing the performance of a light curing polymer system including multiple different types of components, the types of components including a light source, a photoinitiator and a substrate, where the light source is arranged to radiate a set of wavelenghts through the substrate to the photoinitiator, the substrate allows only a set of wavelengths of light to pass there through comprising at least one wavelength to which the photoinitiator is responsive, and the photoinitiators is activated only when it is irradiated with the set of wavelengths passed through the substrate (¶s 0004, 0007, 0008, 0069), the method of optimizing including the steps of:

a). selecting a first component from a first type of component from a database, said first component operating at first set of wavelengths defining a first wavelength spectrum (¶s 0007, 0039);

b). selecting a second component from of a second type of from the database of a type different than the first type of the component, the second component operating at a second set of wavelengths defining a second wavelength spectrum, at least one wavelength of said second set of wavelengths being present in said first set of wavelengths (¶s 0038, 0040).

Lackritz does not explicitly teach a "database" and "displaying the set of wavelengths of the first and second components".

Bogdanowicz teaches a database as database for storing filter transmittance data from the light source (col. 5, lines 24-32) and displaying the set of wavelengths of the first and second components (col. 5, lines 57-61; col. 6, lines 16-30).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teachings of the cited references because **Lackritz's** teaching would have allowed **Bogdanowicz's** to facilitate retrieval of data to determine if a further filter selected is needed in order to achieve the desired balance as suggested by **Bogdanowicz** at (col. 5, lines 24-26).

Regarding claims 6 and 7, **Lackritz** further teaches wherein wavelength regions are established and a representative name is assigned to each wavelength region (¶s 0007, 0008, and 0042, 0052; Fig. 3).

Lackritz does not explicitly teach a "database".

Bogdanowicz, however, teaches a database as database for storing filter transmittance data from the light source (col. 5, lines 24-32).

Regarding claim 8, **Lackritz** further teaches wherein the representative names of the selected first component are compared to the representative names of components of the second type of components so that only a component of the second type of

component having at least one representative name in common with the selected first component can be selected (¶s 0034, 0053, and 0056).

Regarding claim 9, **Lackritz** further teaches selecting a component from a third type of component different than the first or second types of components, the third component operating at a third set of wavelengths defining a third wavelength spectrum, at least one wavelength of said third set of wavelengths being present in said first and second sets of wavelengths (¶s 0034, 0053, and 0057).

Lackritz does not explicitly teach a "database".

Bogdanowicz, however, teaches a database as database for storing filter transmittance data from the light source (col. 5, lines 24-32).

Regarding claim 10, **Lackritz** teaches method of comparing performance characteristics of components of different types of components of a light curing polymer system where a light source is directed through a substrate to a photoinitiator, the light source operating at a first set of wavelengths, the substrate allows a second set of wavelengths of light to pass therethrough and the photoinitiator is activated only when it is irradiated with at least one wavelength that is in the second set of wavelengths (¶s 0004, 0007, 0008, 0069), the method of comparing including the steps of:

b). selecting a first component of a first type of componet (¶s 0039 and 0056);

c). selecting a second component of a second type of component different from the first type (¶s 0048 and 0056);

Lackritz does not explicitly teach the steps of:

a). storing the performance characteristics of components in memory, the performance characteristics including a name and wavelength response;

d). graphically displaying on the same display, the name and wavelength response of the first component and the second component.

Bogdanowicz, however, the steps of:

a). storing the characteristics of the constituent in memory, the characteristics including name and wavelength response (col. 3, lines 6-14; col. 5, lines 57-61);

d). graphically displaying on the same display, the name and wavelength response of the first component and the second component (col. 5, lines 57-61; col. 6, lines 16-30).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teachings of the cited references because **Lackritz's** teaching would have allowed **Bogdanowicz's** to allow the photographer to select a desired set of filters for use in matching the light source to the photographic material and to determine if a further filter selected is needed in order to achieve the desired balance as suggested by **Bogdanowicz** at (col. 5, lines 15-20 and 24-26).

Regarding claims 11-12, **Lackritz** further teaches determining an area of an overlapping region of the wavelength responses of the first and second components (¶ 0094).

Regarding claims 14-15, **Bogdanowicz** further teaches the steps of:

a). presenting on a display a menu for selection of a component from a database, the database including at least a set of first components of a first type of component and a set of second components of a second type of component different than the first type of component (col. 3, lines 6-10 and 29-32; col. 5, lines 15-25).

b). presenting on the display at least one second component chosen from the set of second components, each of the chosen at least one second component operating at a second set of wavelengths and having a second wavelength spectrum, the at least one second component chosen because at least one wavelength of said second set of wavelengths is present in the first set of wavelengths, wherein the second component is selected from the at least one second component displayed (col. 3, lines 6-10 and 29-32; col. 5, line 57 – col. 6, line 3).

Response to Arguments

Applicant's arguments filed 06 June 2006 have been fully considered but they are not persuasive.

Applicants argue that neither Lackritz nor Bogdanowicz teach the presently claimed method of selection of a photosensitive material that is exposable through a substrate. Further, the term component and component type as used by Lackrtiz is different than the definition of those terms in the present claims. Lackritz uses "type", however, to mean what Applicants designate as "component".

In response to the preceding arguments, Examiner respectfully submits that Applicants' limitations "selecting a first component from a first type of component..." ... "selecting a second component from a second type of component..." are broadly claims that Lackritz's teaching of "two hypothetical types of photosensitive molecules": a first type of photosensitive molecule 302 and a second type of photosensitive molecule 304. Their different response characteristics can be exploited to effect separate activation by exposing them to different wavelengths of light [0039] reads on Applicants claimed limitations. Applicants alleged that Lackrtiz's usage of "component" and "component type" is different than the definition of Applicants claimed "types" and "component", it is noted that the features upon which applicant relies (i.e., the component types are light source, substrate, and photoinitiator and the corresponding component are infrared, visible, and UV lights (for component type light source); polyester, polycarbonate, polyimide (for component type substrate); Disperse Blue 1 and Methylene Blue (for component type photoinitiator)) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Applicant's election with traverse of group I claims 5-12 in the reply filed on 05 October 2006 is acknowledged. The traversal is on the ground(s) that since each of the two groups of claims relates to a photocuring system, the searches required will substantially the same. A search for one method should also produce references

concerning the other. This is not found persuasive because Group I, claims 5-12 and 14-15, drawn to optimizing the performance of a light curing polymer system, classified in class 156, subclass 275.5; Group II, claims 16-20, drawn to irradiating compositions using wave energy wherein at least two distinct external radiant energy sources are utilized, classified in class 522, subclass 4.

Group I acquired a separate status in the art as shown by its different classification. These inventions are distinct for the reasons given above and the search required for Group I is not required for the other Groups. As a result, the restriction for examination purposes as indicated is proper.

The requirement is still deemed proper and is therefore made FINAL.

This application contains claims 16-20 drawn to an invention nonelected with traverse filed 05 October 2006. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leslie Wong whose telephone number is (571) 272-4120. The examiner can normally be reached on Monday to Friday 9:30am - 6:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, CHARLES RONES can be reached on (571) 272-4085. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Leslie Wong
Primary Patent Examiner
Art Unit 2164

LW
December 24, 2006